Patent No. 7,270,783

Paper Dated: January 3, 2008 Attorney Docket No. 0116-011833

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No.

7,270,783

Confirmation No. 3750

Inventor

TOSHIKAZU TAKASE

Issued

September 18, 2007

Title

ANALYSIS SYSTEM AND ANALYSIS METHOD

Examiner

Jyoti Nagpaul

Customer No.

28289

Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

ATTENTION:

Decision and Certificate of Correction Branch

Patent Issue Division

REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT

FOR PTO MISTAKE (37 C.F.R. 1.322(a))

Sir:

In accordance with 35 U.S.C. §254, we attach hereto Form PTO/SB/44 and a copy of proof of PTO errors and request that a Certificate of Correction be issued in the above-identified patent. The following errors appear in the patent as printed:

Column 12, lines 57-58, Claim 9, delete [[above-described]]

(See the Amendment dated November 30, 2006, page 5, line 5 of Claim 12. See also the amendment made by the Examiner in Examiner's Amendment accompanying the Notice of Allowability mailed June 13, 2007, page 2, line 11. NOTE: The Examiner inadvertently referred to "above-described" as "aforementioned". The PTO did correctly delete this from Claim 21 (issued as Claim 15.) Claim 12 issued as Claim 9.)

Column 12, line 59, Claim 9, "peocessing" should read -- processing --

(See the Amendment dated November 30, 2006, page 5, and the hand-written Examiner's Amendment on line 6 of Claim 12. See also the Examiner's Amendment accompanying the Notice of Allowability mailed June 13, 2007, page 2, line 12. (Claim 12 issued as Claim 9.)

Column 14, line 11, Claim 15, "aanalysis system throughpout" should read

-- analysis system throughout --

(See the Amendment dated November 30, 2006, page 7, and the hand-written Examiner's Amendment on line 4 of Claim 21. See also the Examiner's Amendment accompanying the Notice of Allowability mailed June 13, 2007, page 2, line 16. Claim 21 issued as Claim 15.)

Respectfully submitted,

THE WEBR LAW FIRM

By:

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Mary Jo Sinicrope

January 3, 2008.

01/03/2008

Date

Typed Name of Person Signing Certificate

Signature

I hereby certify that this correspondence is being electronically

submitted to the United States Patent and Trademark Office on

LQ6861.DOC

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.

10/004,259

Confirmation No. 3750

Applicants

: .

TOSHIKAZU TAKASE ET AL.

Filed

Title

November 1, 2001

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ANALYSIS SYSTEM AND ANALYSIS METHOD

Art Unit

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Examiner

Jyoti Nagpaul

Customer No.

28289

1743

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### **AMENDMENT**

Sir:

In response to the Office Action of November 2, 2006, please amend the above-identified application as follows.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 9 of this paper.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 30, 2006.

Lori A. Fratangelo
(Name of Person Making Deposit)

Signature

11/30/2006

Date

evaporating off a first solvent from each sample and drying and solidifying the sample;

dispensing a second solvent into each sample dried and solidified;

stirring each sample in which said second solvent has been dispensed;

aspirating the sample in which said second solvent has been dispensed and transferring the sample into a measuring portion;

recovering the investigated sample into said sample container after measurement; and

recovering said sample containers in which the samples have been recovered.

Claim 10 (Withdrawn): The analysis method of claim 9, further comprising the step of skipping desired ones of said steps.

Claim 11 (Withdrawn): The analysis method of claim 9, wherein said samples are solutions including said first solvent.

Claim 12 (Currently Amended): An analysis system comprising:

- a sample container supply means for supplying sample containers each holding a sample dissolved in protonated solvent therein;
- a turntable for carrying sample containers and incrementally rotating to present the sample containers at various stations;
- a solvent-removing means for evaporating off the protonated solvent in the supplied sample containers and drying and solidifying each sample comprising nozzles for removal of the solvent by injecting gas into the sample container, the depth of the insertion of the nozzles into the sample container being increased as the progress of removal;

a source of deuterated solvent;

- a solvent-dispensing means for dispensing a deuterated solvent from said source into each dried and solidified sample;
- a sample-stirring means for stirring each sample in which said deuterated solvent has been dispensed;
- a sample aspirating-and-transferring means for aspirating each sample dissolved in said deuterated solvent and transferring the aspirated sample into a measuring portion;

{W0318480.1}

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a sample recovery means for recovering the sample into a sample container from said measuring portion after measurement;

a sample container recovery means for recovering the sample containers in which the investigated samples have been recovered; and

a control means for controlling all of the above-described various means.

operation of the analysis system throughout sample processing.

Claim 3 (Original): The analysis system of claim 12, wherein said solvent-

removing means comprises a sample container temperature-adjusting means for adjusting the temperature of the sample container to a desired temperature and a gas blowout means for blowing a regulated flow rate of gas against the sample, the gas being adjusted to a desired temperature.

Claim 14 (Previously Presented): The analysis system of claim 12, wherein said deuterated solvent contains plural kinds, and wherein said solvent-dispensing means is capable of selecting a desired one out of the plural kinds of said deuterated solvent and dispensing it.

Claim 15 (Original): The analysis system of claim 12, wherein the sample aspirated and transferred by said aspirating-and-transferring means is subjected to measurement and then the sample is pushed out of the measuring portion by a gas under pressure, whereby the sample is recovered into the sample container.

Claim 16 (Original): The analysis system of claim 12, wherein a rack for accommodating the sample containers recovered by said sample container recovery means is of microplate size.

Claim 17 (Original): The analysis system of claim 12, wherein said samples are solutions including said first solvent.

Claim 18 (Withdrawn): An analysis method comprising the steps of: supplying sample containers each holding a sample therein;

evaporating off a first solvent from the sample in each supplied sample container and drying and solidifying the sample; {W0318480.1}

Page 5 of 9

dispensing a second solvent into each sample dried and solidified;

stirring each sample in which said second solvent has been dispensed;

aspirating each sample dissolved in said second solvent and transferring the sample into a measuring portion;

recovering each sample into a sample container from said measuring portion after measurement; and

recovering the sample containers in which the investigated samples have been recovered.

Claim 19 (Withdrawn): The analysis method of claim 18, further comprising the step of skipping desired ones of said steps.

Claim 20 (Withdrawn): The analysis method of claim 18, wherein said samples are solutions containing said first solvent.

Claim XI (Currently Amended): An analysis system comprising:

- a sample container supply means for supplying sample containers each holding a sample dissolved in protonated solvent therein;
- a turntable for carrying sample containers and incrementally rotating to present the sample containers at various stations;
- a solvent-removing means for evaporating off a first solvent from each sample and drying and solidifying the sample comprising nozzles for removal of the solvent by injecting gas into the sample container, the depth of the insertion of the nozzles into the sample container being increased as the progress of removal;
  - a source of deuterated solvent;

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- a solvent-dispensing means for dispensing a deuterated solvent from said source into each sample container;
- a sample-stirring means for stirring each sample in which said deuterated solvent has been dispensed;
- a sample aspirating-and-transferring means for aspirating each sample dissolved in said deuterated solvent and transferring the sample into a measuring portion;
- a sample recovery means for recovering the sample into a sample container from said measuring portion after measurement; {W0318480.1}

Page 6 of 9

a sample container recovery means for recovering each sample container in which the investigated sample has been recovered; and

a control means for controlling all of the above-described various means

Claim 22 (Previously Presented): The analysis system of claim 21, wherein said deuterated solvent contains plural kinds, and wherein said solvent-dispensing means is capable of selecting a desired one out of the plural kinds of said deuterated solvent and dispensing it.

Claim 23 (Original): The analysis system of claim 21, wherein the sample aspirated and transferred by said aspirating-and-transferring means is subjected to measurement and then pushed out of said measuring portion by a gas under pressure, whereby the sample is recovered into said sample container.

Claim 24 (Original): The analysis system of claim 21, wherein the rack for holding the sample containers recovered by said sample container recovery means is of microplate size.

Claim 25 (Previously Presented): The analysis system of claim 21, wherein the samples are solutions dissolved in said deuterated solvent or are a solid.

Claim 26 (Withdrawn): An analysis method comprising the steps of: supplying sample containers each holding a sample therein; dispensing a second solvent into each sample container; stirring the sample in which said second solvent has been dispensed; aspirating each sample containing said second solvent and transferring the

aspirating each sample containing said second solvent and transferring the sample into a measuring portion;

recovering each sample into a sample container from said measuring portion after measurement; and

recovering each sample container in which the investigated sample has been recovered.

### UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

28289

7590

06/13/2007

THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING 436 SEVENTH AVENUE PITTSBURGH, PA 15219

EXAMINER

NAGPAUL, JYOTI

ART UNIT PAPER NUMBER

1743

DATE MAILED: 06/13/2007

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,259	11/01/2001	Toshikazu Takase	116-011833	3750

TITLE OF INVENTION: ANALYSIS SYSTEM AND ANALYSIS METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$0	\$1700	09/13/2007

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

	Application No.	Applicant(s)					
	10/004,259	TAKASE ET AL.					
Notice of Allowability	Examiner	Art Unit					
	lvoti Nagpoul	4740					
	Jyoti Nagpaul	1743					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.							
1. 🗵 This communication is responsive to <u>December 4, 2006</u> .							
2.  The allowed claim(s) is/are <u>1-8,12-17 and 21-25</u> .							
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). <ul> <li>a)  All b)   Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul> </li> <li>Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.</li> <li>4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.</li> <li>5.  CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1)  hereto or 2)  to Paper No./Mail Date</li> </ul>							
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date							
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).							
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
<ul> <li>Attachment(s)</li> <li>1. ☐ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☑ Information Disclosure Statements (PTO/SB/08),</li></ul>	5. ☐ Notice of Informal P 6. ☐ Interview Summary Paper No./Mail Dat 7. ☑ Examiner's Amendn 8. ☑ Examiner's Stateme 9. ☐ Other	(PTO-413), e					
	~						

Application/Control Number: 10/004,259

Art Unit: 1743

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### **EXAMINER'S AMENDMENT**

Claims 1-8, 12-17 and 21-25 are allowed.

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Hanson on February 26, 2007.

The application has been amended as follows:

Cancel Claims 9-11, 18-20 and 26-32.

Claim 1, Line 24 after "for", insert —sequentially—

Claim 1, Line 24 after "controlling", delete "all of"

Claim 1, Line 24 after "the", delete <u>"aforementioned"</u> various means", insert –operation of the analysis system throughout sample processing—

Claim 12, Line 22 after "for", insert -sequentially-

Claim 12, Line 22 after "controlling", delete "all of"

Claim 12, Line 22 after "the", delete "aforementioned various means", insert –operation of the analysis system throughout sample processing—

Claim 21, Line 21 after "for", insert -sequentially-

Claim 21, Line 21 after "controlling", delete "all of"

Claim 21, Line 21 after "the", delete "aforementioned various means", insert —operation of the analysis system throughout sample processing—

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Lescons Charles

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

(Also Form PTO-1050)

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO.

7,270,783

APPLICATION NO.

10/004,259

**ISSUE DATE** 

September 18, 2007

**INVENTORS** 

Takase et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 12, lines 57-58, Claim 9, delete [[above-described]]

Column 12, line 59, Claim 9, "peocessing" should read -- processing --

<u>Column 14</u>, line 11, Claim 15, "aanalysis system throughpout" should read -- analysis system throughout --

MAILING ADDRESS OF SENDER: The Webb Law Firm

The Webb Law Firm 700 Koppers Building 436 Seventh Avenue Pittsburgh, PA 15219

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-2450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select Option 2.